

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION N	Ю.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,370		01/26/2001	Eric Malcolm Rives	72135	6461
27975	7590	06/22/2004		EXAMINER	
-	•	OPPELT, MILBRA ER 255 SOUTH ORA	LE, LANA N		
P.O. BOX		ER 233 300 111 OR	ART UNIT	PAPER NUMBER	
ORLANI	OO, FL 32	802-3791		2685	
				DATE MAILED: 06/22/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

•		Application No.	Applicant(s)					
		09/771,370	RIVES ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Lana N Le	2685					
Period fo	The MAILING DATE of this communication or Reply	n appears on the cover sheet w	ith the correspondence address	••				
A SH THE - Exte after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR R MAILING DATE OF THIS COMMUNICATI ensions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communicatic a period for reply specified above is less than thirty (30) days, o period for reply is specified above, the maximum statutory pure to reply within the set or extended period for reply will, by reply received by the Office later than three months after the led patent term adjustment. See 37 CFR 1.704(b).	ON.  FR 1.136(a). In no event, however, may a on.  , a reply within the statutory minimum of thi period will apply and will expire SIX (6) MO statute, cause the application to become A	reply be timely filed  rty (30) days will be considered timely.  NTHS from the mailing date of this communic.  BANDONED (35 U.S.C. § 133).	ation.				
Status								
1)⊠	Responsive to communication(s) filed on	05 April 2004.						
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠	This action is non-final.						
3)	Since this application is in condition for all closed in accordance with the practice un	•	• •	s is				
Disposit	ion of Claims	del Ex parte Quayle, 1999 C.	2. 11, <del>400</del> 0.0. 210.					
· _		ng in the application						
4)[	Claim(s) <u>1,3-7,10,11 and 14</u> is/are pendin 4a) Of the above claim(s) is/are wit	= ::						
5\ ∑	Claim(s) <u>1, 3-5, 10, 11, 14</u> is/are allowed.							
	Claim(s) <u>6 and 7</u> is/are rejected.							
·	· · · ———							
-	Claim(s) is/are objected to. Claim(s) are subject to restriction a	and/or election requirement						
	ion Papers							
	•	minor						
•	☐ The specification is objected to by the Examiner. ☐ The drawing(s) filed on							
ם(טי	The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
111		•		• •				
	The oath or declaration is objected to by the	Te Examiner. Note the attache	d Office Action of form P10-152	۷.				
Priority (	under 35 U.S.C. § 119							
a)	Acknowledgment is made of a claim for fo  All b) Some * c) None of:  1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International B See the attached detailed Office action for	ments have been received.  ments have been received in a priority documents have been sureau (PCT Rule 17.2(a)).	Application No n received in this National Stage	;				
Attachmer	• •	_						
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-94		Summary (PTO-413) (s)/Mail Date					
3) 🔲 Infor	ce of Draftsperson's Patent Drawing Review (P10-94 mation Disclosure Statement(s) (PT0-1449 or PTO/5 er No(s)/Mail Date		Informal Patent Application (PTO-152)					

Application/Control Number: 09/771,370

Art Unit: 2685

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pande et al in view of Jeong (US 6,532,240) and further in view of Wala (US 6,112,086).

Regarding claim 6, Pande et al discloses a loop-powered digital radio comprising:

a line interface 16 that is adapted to be coupled to a wireline communication link over which digital communication signals sourced from first digital communication equipment installed at a first site are transported, the wireline communication link also conveying electrical power for operating wireline digital communication equipment coupled thereto, the line interface being operative to extract power from the wireline communication link and interface digital telecommunication signals transported thereover (col 5, lines 20-24; lines 52-56);

a wireless transceiver 14, coupled to the line interface and being configured to wirelessly transmit and receive RF energy containing the digital telecommunication signals (col 5, lines 25-42); and

Application/Control Number: 09/771,370

Art Unit: 2685

a DC-DC voltage converter coupled to the line interface and being operative to convert power extracted thereby to voltages necessary to operate the wireless transceiver (col 5, lines 43-57; col 9, lines 32-65).

Pande et al fail to further disclose the digital telecommunication signals comprise T1 rate; the line interface includes a T1 framer, and wherein the wireless transceiver includes a transmitter unit that is configured to perform modulation and up-conversion to RF of baseband T1 digital communication signals provided by the T1 framer, and a receiver unit that is configured to perform RF to baseband down-conversion and demodulation of Rf energy received thereby and containing T1 digital communication signals for application to the T1 framer.

Jeong discloses disclose the line interface includes a T1 framer (col 2, line 56-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a T1 framer in the line interface in order to route data through the line interface to the other unit.

Pande and Jeong fail to further disclose: the digital telecommunication signals comprise T1 rate; and wherein the wireless transceiver includes a transmitter unit that is configured to perform modulation and up-conversion to RF of baseband T1 digital communication signals provided by the T1 framer, and a receiver unit that is configured to perform RF to baseband down-conversion and demodulation of Rf energy received thereby and containing T1 digital communication signals for application to the T1 framer.

Wala discloses the digital telecommunication signals comprise T1 rate (col 6, lines 25-32); and wherein the wireless transceiver includes a transmitter unit that is configured to perform modulation at 418 and up-conversion to RF at 419 of baseband T1 digital communication signals provided by the T1 framer at 404 (col 7, line 63 – col 8, line 3; fig. 4), and a receiver unit that is configured to perform RF to baseband down-conversion at 427 and demodulation of RF energy received thereby at 428 and containing T1 digital communication signals for application to the T1 framer at 404 (col 8, line 9-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a transmitter and receiver that receives and transmits digital signals via a T1 link interface in order to transmits and receives the necessary data information to and from the T1 interface.

Regarding claim 7, Pande et al further disclose the loop-powered digital radio according to claim 6 wherein the line interface 16 is adapted to be coupled to the wireline communication link at a second site ODU that is remote from the first site IDU indoor unit and provides no source of electrical power, exclusive of that conveyed by the wireline link, that is sufficient to operate the radio.

Application/Control Number: 09/771,370 Page 5

Art Unit: 2685

## Allowable Subject Matter

1. Claims 1, 3-5, 10, and 14 are allowable over the cited prior art.

2. The following is an examiner's statement of reasons for allowance:

Regarding claim independent claim 1, it contains the objected subject matter of previous claim 2.

Regarding independent claim 10, it contains the objected subject matter of previous claims 12 & 13.

Regarding independent claim 14, it was the previous objected claim 14 made independent.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lana N Le whose telephone number is (703) 308-5836. The examiner can normally be reached on M-F 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F Urban can be reached on (703) 305-4385. The fax phone

Application/Control Number: 09/771,370

Art Unit: 2685

872-9306.

number for the organization where this application or proceeding is assigned is 703-

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lana Le

June 14, 2004

Page 6